ADDs and MPOs, identifying and discussing intermodal issues through the Statewide Transportation Planning Meetings, the identification of intermodal access projects in the Unscheduled Projects List, and the dedication of specific staff to the freight movement issues. Improvement projects and strategies resulting from the studies and prioritization process based on selected criteria, as well as the other pertinent data, will be considered for inclusion in the statewide transportation plan for future implementation. TEA-21 further required that (1) the plans and programs for each state provide for development of integrated management and operation of transportation systems that will function as an intermodal transportation system for the state, and an integral part of an intermodal transportation system for the United States, and (2) the process shall provide for consideration of all modes and be continuing, cooperative, and comprehensive.

SAFETEA-LU also mandated the specific listing of pedestrian walkways and bicycle transportation facilities for all projects using federal funds as well as adding a new stand-alone planning factor to "increase the security of the transportation system for motorized and non-motorized users." The Cabinet is attempting to be "pre-compliant" with these SAFETEA-LU regulations to the extent practicable.

SAFETEA-LU outlines that each state carry out a statewide transportation planning process that provides for consideration and implementation of projects, strategies, and services that will promote efficient system management and operation, and emphasize the preservation of the existing transportation system. In keeping with SAFETEA-LU, the KYTC mission is "to provide a safe, secure, and reliable highway system that ensures the efficient mobility of people and goods, thereby enhancing both the quality of life and economic vitality of the Commonwealth." Simply stated, the KYTC's goal is to provide "safe and reliable roads, roads that lead to jobs," and the 2006 Enacted SYP and FY 2007-2010 STIP have been developed to support that goal.

## 1. Planned Highway Improvements

In developing the highway element of the FY 2007-2010 STIP, the KYTC relied heavily upon its ongoing project identification and scheduling mechanisms, particularly the long-range planning process. The KYTC projected federal and state funding levels and produced the development of the Recommended FY 2007-2012 Six-Year Highway Plan (SYP) submitted to the Kentucky General Assembly in February 2006, and they approved the 2006 Enacted SYP in April 2006. The 2006 Enacted SYP constitutes the primary basis for the federal-aid highway element of the FY 2007-2010 STIP. Included within the 2006 Enacted SYP are projects shown as having HPP funding and KYD funding. These are projects that have been earmarked by Congress to be funded with special high priority (HPP) funding, or have been earmarked by Congress to receive federal discretionary (KYD) funding. Also, included within the 2006 Enacted SYP are projects that are scheduled to use GARVEE Bond funding as described within STIP Development; Section 5: Fiscal Constraint information.

To help achieve these goals, the identification of highway needs has been accomplished through in-house evaluations of highway performance and adequacy, meshed with input received from state legislators, local officials through MPO TIPs and Long-Range Transportation Plans, input from non-urban local officials and ADD transportation committees, small urban area transportation studies, consideration of comments from the general public, and within our own agency's Central Office and District Offices. Each of these sources yielded valuable input for consideration in the development of the state's Long-Range and Six-Year Highway programs.

The KYTC considered technical data on the ability of candidate projects to improve safety, increase system reliability, and contribute toward enhancing regional economic attractiveness. Unfortunately, the needs on our highway system far outweigh our ability to meet them all. The KYTC is working to improve the evaluation of all active and potential projects to ensure that every dollar we spend is used to address the most critical and cost effective improvements. In doing so, the KYTC can concentrate available funds on those projects that truly result in safer roadway conditions, better pavements and bridges, and improved local economies.

As the Six-Year Highway Plan was developed, projects were pulled from the Cabinet's Long-Range Transportation Plan, which is formally updated periodically, and draws from the MPO Long-Range Transportation Plans, to fill in gaps where federal and state funding could reasonably be expected from FY 2007-2010. By following this continuing process, the Cabinet's long-range planning efforts have served to maintain a stream of prioritized candidate projects for inclusion and advancement in Kentucky's Six-Year Highway Plan. As the federally-required long-range planning process matures, the Six-Year Highway Plan and STIP documents will be strengthened by the focus on longer-range program management considerations. It is expected that future editions of Kentucky's STIP will reflect a strategy for implementation resulting from more clearly defined longer-range transportation goals.

As outlined within the STIP Introduction, the FY 2007-2010 STIP is a planning document that covers a period of four years, and is updated every two years upon approval of the KYTC Six-Year Highway Plan (SYP) by the Kentucky General Assembly. Project phases scheduled for FY 2006 in the STIP, are scheduled to be obligated before the end of FY 2006. However, for those project phases scheduled for FY 2006 that the scheduled funding is not obligated before the end of FY 2006, the identified scheduled funding of the project will roll over into FY 2007. With the STIP being a planning document, the projects, schedules, and estimated costs identified within the FY 2007-2010 STIP are based upon the most current project information at the time of preparing the SYP and STIP. As work progresses within each phase of the projects, the project team refines the project scope, schedules, and estimated costs to complete the project. The programming of project funding for project refinements will follow the STIP amendments/revisions process outlined in Section 6 of the STIP, and along with the STIP end of Fiscal Year "fiscal constraint" recalculations.

The listing of FY 2007-2010 STIP projects is contained in Appendix A, Exhibit A-5. The KYTC will administer each of the projects listed unless clearly indicated in the project description as being handled otherwise. Included as part of the listing of projects, is the "Priority" column which is a quick reference for project priority of the corresponding project. The project priority is listed as Safety, Reliability, or Economic Development as defined by the following definitions:

<u>Safety:</u> Providing for the safety and security of the motorists who travel Kentucky's highways is the KYTC's highest priority. The FY 2007-2010 STIP includes several programs of projects that serve to address the safety needs on Kentucky's highways. SAFETEA-LU requires that all states develop a Highway Safety Improvement Program (HSIP) that combines all statewide enforcement, engineering, education, and emergency

response issues into a single coherent plan. The "engineering" element of the HSIP is included in the Six-Year Highway Plan, while the other issues are funded through the regular budgets of the KYTC and the Justice Cabinet.

The "engineering" component of highway safety generally revolves around the federal-aid Hazard Elimination and Safety (HES) and Rail/Highway Crossing (RRP and RRS) Programs. In addition to multiple site-specific roadway improvements carried out through these programs, the KYTC is also seeking to implement low-cost safety improvements that can be accomplished with state maintenance forces with minimum disruption to the traveling public. Additionally, the KYTC is working to implement a new program aimed at reducing "lane departures." Envisioned to run parallel with the KYTC's resurfacing program, the idea is to address known safety issues (such as tree removal, centerline rumble strips, old concrete headwall removals, etc.) to eliminate roadside obstacles or otherwise improve safety as the road is being resurfaced. Again, the focus is on minimal disruption to the traveling public as this service is being performed.

Reliability: The condition of roads and highways in the state is a primary concern among Kentucky's citizens. Poor pavements detract from the driving experience, and road maintenance and resurfacing are the top transportation investment needs in our state. These issues certainly resonate with the KYTC, as we too see the value in protecting the infrastructure with which the public has entrusted to us.

In an effort to provide a consistent, ongoing set of performance measurements for the maintenance condition of Kentucky's state-maintained highway system, the KYTC has developed a Maintenance Rating Program (MRP). The purpose of the MRP is to assess maintenance activities as they relate to customer expectations, provide data to support needed performance improvements, ensure that the KYTC system preservation strategies are working, and to meet federal asset management requirements. Through the MRP, the KYTC has proposed some budgetary adjustments for the FY 2007-2010 STIP to increase funding for the maintenance and resurfacing programs in an effort to improve conditions on Kentucky's roadways. There has also been a concerted effort to include essential, major pavement reconstruction projects in the FY 2007-2010 STIP. Again, the KYTC's desire is to improve overall pavement conditions and meet the public expectation that Kentucky's roads will be kept in the best possible shape.

According to the KYTC inventory data, approximately 71% of Kentucky's bridges are performing the function that they were designed to fulfill without presenting any particular problems. Of the remainder, 6% are classified as "structurally deficient" and 23% are classified as "functionally obsolete." The phrase "structurally deficient" implies that there is a structural problem that will eventually require attention. Many times, these structural problems are handled by posting the bridge at a specific maximum loading to prolong the life of the structure. The phrase "functionally obsolete" implies that a bridge is too narrow to accommodate the traffic it carries. While the KYTC is concerned that Kentucky's bridges are functionally wide enough, our major emphasis is on those bridges that present structural condition issues. As the KYTC works to keep Kentucky's bridges safe, the focus of the federal and state bridge replacement programs is to repair or replace those bridges that carry relatively heavy traffic volumes and present the most severe structural problems.

Economic Development: Kentucky's future economy and congestion concerns: The economic development and highway congestion in Kentucky is very much a "relative" issue. While Kentucky does not have the overly-oppressive highway congestion found in many of the nation's very large cities, there are times when congestion in our urban centers is just as frustrating to Kentucky drivers. Morning and afternoon "rush hours" create traffic problems on many of our city streets, urban beltlines, and metro area interstate highway arteries. Additionally, "just in time" delivery schedules have created "rolling warehouses" on many of Kentucky's rural interstates, resulting in truck percentages of 50% in some instances. Such heavy truck volumes choke the traffic-carrying capacity of our major roadways, and create safety issues and driver frustrations. As traffic and freight volumes increase in the years ahead, our existing highway network will become more and more constrained and potentially impact Kentucky's competitiveness in the global marketplace. Thus, each of the FY 2007-2010 STIP projects, whether identified with a purpose of safety, reliability, or economic development, truly has an effect on Kentucky's future economy and congestion concerns.

## 2. Highway Safety Improvement Program (HSIP)

As outlined within SAFETEA-LU Sections 1401 through 1412, the term "Highway Safety Improvement Project" means a project described in the state's Strategic Highway Safety Plan that: (1) corrects or improves a hazardous road location or feature; or (2) addresses a highway safety problem. In addition, the term safety project includes a project to promote the awareness of the public and educate the public concerning highway safety matters and a project to enforce highway safety laws.

The purpose of the Highway Safety Improvement Program (HSIP) is to achieve a significant reduction in traffic fatalities and serious injuries on public roads. Each of the following areas within the HSIP will be conducted in accordance with regulations as outlined in the corresponding sections of SAFETEA-LU and Title 23.

## Hazard Elimination and Safety Program (HES) – High Cost Improvements

The Hazard Elimination and Safety (HES) Program identifies corrective measures for locations with a significant collision experience, ultimately providing a greater degree of safety for the traveling public. Project improvements are typically higher cost solutions. Common projects include: adding turn lanes at intersections, improving sight distance, changing horizontal/vertical alignment, installing intersection lighting, etc.

The process steps are: (1) identification of high collision locations, (2) analysis of selected high collision locations, and (3) select locations for HES projects. However, projects must meet the following basic requirements for acceptance into the HES program:

- a. A minimum number of collisions over a three year period, 5 for rural and 14 for urban locations
- b. Have a Critical Rate Factor of 1.0 or greater
- c. A total project cost not to exceed \$1,500,000 for all phases of work
- d. Have a Benefit Cost Ratio greater than 1.0
- e. Proposed project addresses the pattern of collisions